What is claimed is:

1. A method of forming a field emission display, comprising:

forming a cathode, the cathode including a plurality of emitters;

forming a plurality of posts over the cathode, the posts comprising a photoresist material;

coating the posts with a coating material, the coating material forming sidewalls around the posts;

removing the photoresist material from within the sidewalls;

forming an anode and spacing the anode apart from the cathode, the sidewalls extending from the cathode to the anode.

2. A method according to claim 1, wherein the coating material comprises silicon oxide.

3. A method according to claim 1, wherein the coating material comprises silicon nitride.

4. A method according to claim 1, wherein forming the plurality of posts over the cathode comprises:

forming a layer of photoresist material over the cathode;

exposing selected portions of the photoresist material to radiation;

exposing the photoresist material to an etchant.

5. A method according to claim 1, wherein forming the cathode comprises:

forming an insulating layer over a substrate, the insulating layer defining a plurality of void regions;

forming a conductive grid layer over the insulating layer, the conductive grid layer defining a plurality of apertures, each one of the apertures corresponding to one of the void regions and each aperture overlying its corresponding void region;

forming the plurality of emitters over the substrate, each one of the emitters corresponding to one of the void regions and one of the apertures, each emitter being disposed within its corresponding void region.

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Date of Deposit: **August 31, 2000**

6. A method according to claim 1, further comprising substantially evacuating the space between the anode and cathode to form a vacuum between the anode and cathode, the sidewalls maintaining the spacing between the anode and the cathode.

7. A method according to claim 1, wherein coating the posts with the coating material comprises forming a layer of the coating material on a top of the posts, on a side of the posts, and on a top of the cathode.

8. A method according to claim 7, further comprising removing substantially all of the coating material from the top of the posts and from the top of the cathode.

9. A method according to claim 7, further comprising etching the coating material anisotropically.

10. A method according to claim 9, wherein etching the coating material anisotropically comprises etching the coating material faster in a vertical direction than in a horizontal direction.

11. A method according to claim 1, wherein a height of the sidewalls is at least 8 times greater than a width of the sidewalls.

12. A method according to claim 1, further comprising heating the posts prior to coating the posts with the coating material.

13. A method according to claim 1, further comprising heating the posts after coating the posts with the coating material.

14. A method of forming a field emission display, comprising:

forming a cathode, the cathode including a plurality of emitters;

forming a plurality of posts over the cathode, the posts comprising a photoresist material;

coating the posts with a coating material, each post and the coating material that coats that post forming a column;

forming an anode and spacing the anode apart from the cathode, the columns extending from the cathode to the anode.

Express Mail Label No.: **EM259583488US**
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15. A method according to claim 14, wherein the coating material comprises silicon oxide.

16. A method according to claim 14, wherein the coating material comprises silicon nitride.

17. A method according to claim 14, wherein forming the plurality of posts over the cathode comprises:

forming a layer of photoresist material over the cathode;

exposing selected portions of the photoresist material to radiation;

exposing the photoresist material to an etchant.

18. A method according to claim 14, wherein forming the cathode comprises:

forming an insulating layer over a substrate, the insulating layer defining a plurality of void regions;

forming a conductive grid layer over the insulating layer, the conductive grid layer defining a plurality of apertures, each one of the apertures corresponding to one of the void regions and each aperture overlying its corresponding void region;

forming the plurality of emitters over the substrate, each one of the emitters corresponding to one of the void regions and one of the apertures, each emitter being disposed within its corresponding void region.

19. A method according to claim 14, further comprising substantially evacuating the space between the anode and cathode to form a vacuum between the anode and cathode, the columns maintaining the spacing between the anode and the cathode.

20. A method according to claim 14, wherein coating the posts with the coating material comprises forming a layer of the coating material on a top of the posts, on a side of the posts, and on a top of the cathode.

21. A method according to claim 20, further comprising removing substantially all of the coating material from the top of the posts and from the top of the cathode.

22. A method according to claim 21, further comprising heating the posts after removing substantially all of the coating material from the top of the posts.

Express Mail Label No.: **EM259583488US**
Date of Deposit: **August 31, 2000**

23. A method according to claim 20, further comprising etching the coating material anisotropically.

24. A method according to claim 23, wherein etching the coating material anisotropically comprises etching the coating material faster in a vertical direction than in a horizontal direction.

25. A method according to claim 14, wherein a height of the columns is at least 8 times greater than a width of the columns.

26. A method according to claim 14, further comprising heating the posts prior to coating the posts with the coating material.

27. A method according to claim 14, further comprising heating the posts after coating the posts with the coating material.

28. A method of forming a field emission display, comprising:

forming a cathode, the cathode including a plurality of emitters;

forming a plurality of posts over the cathode, the posts comprising a photoresist material;

exposing the posts to an atmosphere comprising silicon;

exposing the posts to reactive oxygen;

forming an anode and spacing the anode apart from the cathode, the posts extending from the cathode to the anode.

29. A method according to claim 28, wherein forming the plurality of posts over the cathode comprises:

forming a layer of photoresist material over the cathode;

exposing selected portions of the photoresist material to radiation;

exposing the photoresist material to an etchant.

30. A method according to claim 28, wherein forming the cathode comprises:

forming an insulating layer over a substrate, the insulating layer defining a plurality of void regions;

forming a conductive grid layer over the insulating layer, the conductive grid layer defining a plurality of apertures, each one of the apertures corresponding to one of the void regions and each aperture overlying its corresponding void region;

forming the plurality of emitters over the substrate, each one of the emitters corresponding to one of the void regions and one of the apertures, each emitter being disposed within its corresponding void region.

31. A method according to claim 28, further comprising substantially evacuating the space between the anode and cathode to form a vacuum between the anode and cathode, the posts maintaining the spacing between the anode and the cathode.

32. A method according to claim 28, wherein a height of the posts is at least 8 times greater than a width of the posts.

33. A method according to claim 28, further comprising heating the posts after exposing the posts to reactive oxygen.

34. A method of forming a field emission display, comprising:

forming an insulating layer over a substrate, the insulating layer defining a plurality of void regions;

forming a conductive grid layer over the insulating layer, the conductive grid layer defining a plurality of apertures, each one of the apertures corresponding to one of the void regions and each aperture overlying its corresponding void region;

forming a plurality of emitters over the substrate, each one of the emitters corresponding to one of the void regions and one of the apertures, each emitter being disposed within its corresponding void region;

forming a plurality of posts over the grid layer, the posts comprising a photoresist material;

coating the posts with a coating material, the coating material forming sidewalls around the posts;

removing the photoresist material from within the sidewalls;

disposing a faceplate opposite the grid layer, the sidewalls extending from the grid layer to the faceplate.

35. A method of forming a field emission display, comprising:

forming an insulating layer over a substrate, the insulating layer defining a plurality of void regions;

forming a conductive grid layer over the insulating layer, the conductive grid layer defining a plurality of apertures, each one of the apertures corresponding to one of the void regions and each aperture overlying its corresponding void region;

forming a plurality of emitters over the substrate, each one of the emitters corresponding to one of the void regions and one of the apertures, each emitter being disposed within its corresponding void region;

forming a plurality of posts over the grid layer, the posts comprising a photoresist material;

coating the posts with a coating material, each post and the coating material that coats that post forming a column;

disposing a faceplate opposite the grid layer, the columns extending from the grid layer to the faceplate.

36. A method of forming a field emission display, comprising:

forming an insulating layer over a substrate, the insulating layer defining a plurality of void regions;

forming a conductive grid layer over the insulating layer, the conductive grid layer defining a plurality of apertures, each one of the apertures corresponding to one of the void regions and each aperture overlying its corresponding void region;

forming a plurality of emitters over the substrate, each one of the emitters corresponding to one of the void regions and one of the apertures, each emitter being disposed within its corresponding void region;

forming a plurality of posts over the grid layer, the posts comprising a photoresist material;

exposing the posts to an atmosphere comprising silicon;

exposing the posts to reactive oxygen;

disposing a faceplate opposite the grid layer, the posts extending from the grid layer to the faceplate.

37. A method of forming a spacer for use in a field emission display, comprising:

forming a plurality of posts over a substrate, the posts comprising a photoresist material;

coating the posts with a coating material, the coating material forming sidewalls around the posts;

removing the photoresist material from within the sidewalls.

38. A method according to claim 37, wherein the coating material comprises silicon oxide.

39. A method according to claim 37, wherein the coating material comprises silicon nitride.

40. A method according to claim 37, wherein a height of the sidewalls is at least 8 times greater than a width of the sidewalls.

41. A method of forming a spacer for use in a field emission display, comprising:

forming a plurality of posts over a substrate, the posts comprising a photoresist material;

coating the posts with a coating material, each post and the coating material that coats that post forming a column.

42. A method according to claim 41, wherein the coating material comprises silicon oxide.

43. A method according to claim 41, wherein the coating material comprises silicon nitride.

44. A method according to claim 41, wherein a height of the posts is at least 8 times greater than a width of the posts.

45. A method of forming a spacer for use in a field emission display, comprising:

forming a plurality of posts over a substrate, the posts comprising a photoresist material;

exposing the posts to an atmosphere comprising silicon;

exposing the posts to reactive oxygen.

46. A method according to claim 45, wherein a height of the posts is at least 8 times greater than a width of the posts.

47. A field emission display comprising:

a cathode comprising a plurality of emitters;

an anode spaced apart from the cathode;

a plurality of spacers, the spacers extending from the cathode to the anode, each of the spacers being formed in the shape of a hollow tube.

48. A field emission display according to claim 47, wherein each of the spacers comprises silicon oxide.

49. A field emission display according to claim 47, wherein each of the spacers comprises silicon nitride.

50. A field emission display according to claim 47, wherein a height of the spacers is at least 8 times greater than a width of the spacers.

51. A field emission display comprising:

a cathode comprising a plurality of emitters;

an anode spaced apart from the cathode;

a plurality of spacers, the spacers extending from the cathode to the anode, each of the spacers comprising a post and a sidewall, the posts being formed from a photoresist material, each sidewall coating at least part of one of the posts.

52. A field emission display according to claim 51, wherein the sidewalls comprise silicon oxide.

53. A field emission display according to claim 51, wherein the sidewalls comprise silicon nitride.

54. A field emission display according to claim 51, wherein a height of the spacers is at least 8 times greater than a width of the spacers.

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